In Response Scapula Fractures: Interobservor Reliability of Classification and Treatment

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Scapula Fractures: Interobservor Reliability of Classification and Treatment

To the Editor:

The authors are commended for addressing a timely, important topic and creating an excellent methodology. The authors observed relatively low reliability of the OTA/AO classification and concluded that a new classification should be considered.

However, the authors did not attempt to determine the source of the disagreement between observers, but implied that the primary source is ambiguity in making radiographic assessments necessary for classification. From the data presented, one likely source of error that is not discussed is poor understanding of the OTA classification system itself, which identifies 3 types of scapula fractures: (1) extra-articular, (2) partial articular, and (3) total articular. The authors show fracture 11 in figure 1 (p125), which is clearly intra-articular. Yet, they report that 28% of reviewers classified this as extra-articular (type A). Although some radiographs may be difficult to tell if there is intra-articular involvement or not, figure 1 is very clearly involving the glenoid articular surface. There must be some other source or cause of disagreement than inability to determine if the fracture is intra-articular. Perhaps, the raters decided to modify the classification based on their own experience rather than applying the classification as described. Perhaps, they did not understand the classification or got confused by the alphanumeric shorthand. Perhaps, they attempted to designate a group before determining the type. This is not merely a difference of opinion but an error by 28% of the observers. The distinction between partial articular and total articular was also a problem in this case. The image shows a partial articular fracture (type B) with most of the glenoid articular surface still attached to the main body of the scapula, yet 19% of observers designated this case a total articular (type C).

When reporting reliability of any fracture classification, the source of the observed disagreement should always be considered. The data presented in this article suggest to me that surgeon ability or willingness to follow the hierarchal decision tree of the OTA Fracture Classification is low. Methods to improve the understanding of the classification are necessary to improve the reliability, rather than replacing the classification. If we create a new classification but no one follows the classification scheme, then poor reliability will persist. Once the classification scheme is understood and consistently applied, research can focus on whether the classification has clinical utility.

Thomas DeCoster, MD
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In Response:

Thank you very much for your constructive letter and clear explanation about the understanding and utility of classification systems. We agree with your explanation and agree that poor understanding of the analyzed fracture classification systems was one reason for the low reliability. As we write at the end of the discussion, clear definitions and training may further help to improve the disagreement. We also agree that we did not determine the intrapersonal source of disagreement between the raters. These shortcomings apply to all studies of reliability of fracture classification. However, the main aim of our study was to compare the reliability of 2 different classification systems for scapular fractures. Because the shortcomings apply to both classifications, we believe our comparison is useful.

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Osteosynthesis of Unstable Intracapsular Femoral Neck Fracture by Dynamic Locking Plate or Screw Fixation: Early Results

To the Editor:

We believe that the results of the article by Thein et al are profoundly interesting. The literature review yields many studies seeking satisfactory success with plate–screw fixation systems for the treatment of femoral neck fractures; however, these efforts failed to meet expectations. We have 2 questions to the authors about the plate–screw system used in the study. Although previously attempted plate–screw systems were composed of fully threaded screws for the femoral head and cortical screws for the femoral shaft, Targon FN system used in the study has telescopic screws. Do the authors attribute the success of the Targon FN system to these telescopic screws so that they allow compression and controlled collapse at the fracture line?

Another issue is that the varus malunion rates with Targon FN are distinctly low when compared with the classic treatment systems. Do the authors attribute this to the valgus reduction of the fracture or the biomechanical superiority of the implant?

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Cemal Kazımoğlu
Istanbul, Turkey

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